

# I-66 Transit/TDM Study

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# Presentation Outline

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# Study Overview

## ❑ Study Goal

To identify more transportation choices through transit and transportation demand management (TDM) enhancements that will increase mobility in the I-66 corridor

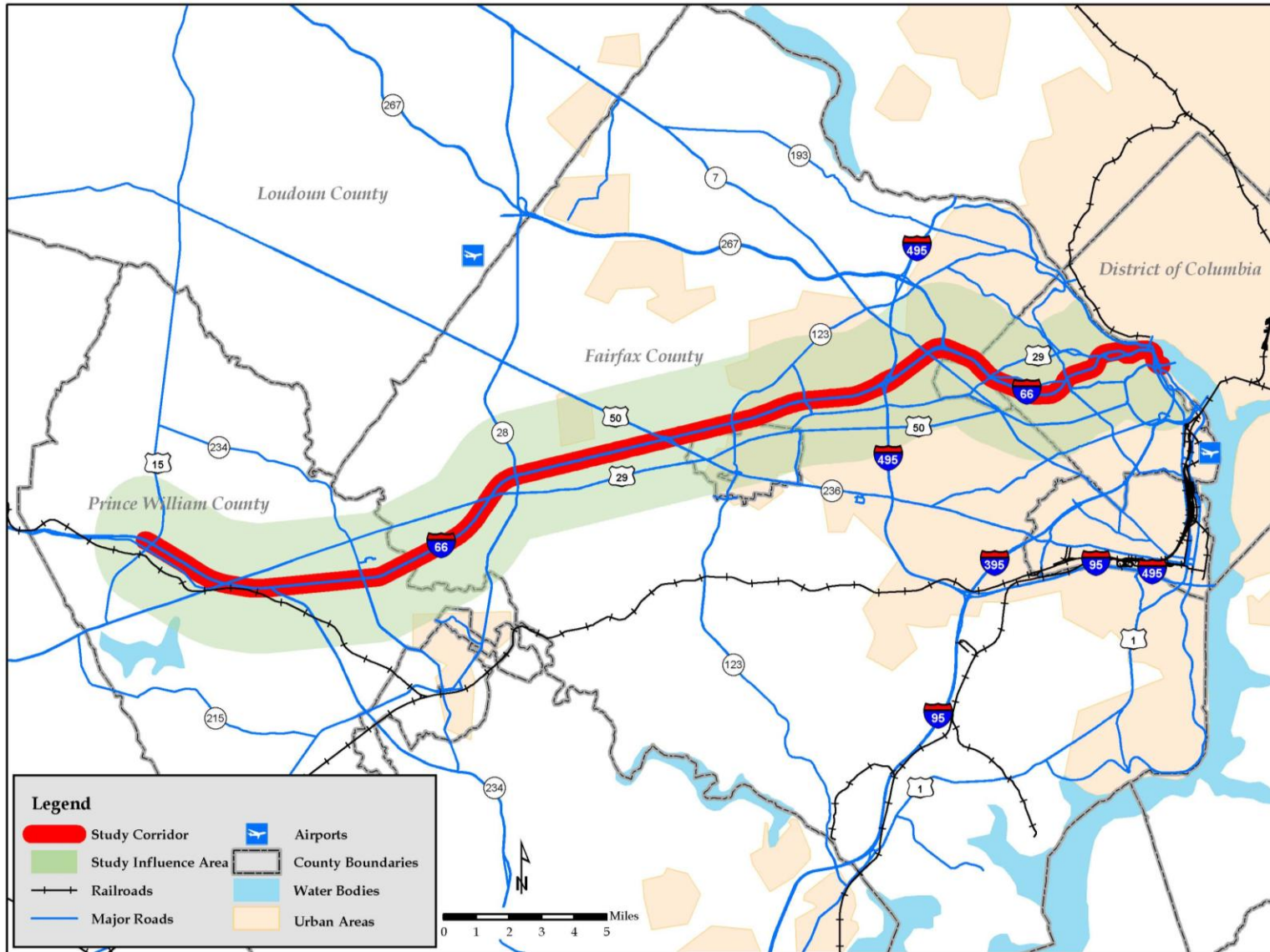
## ❑ Study Scope

- Study the I-66 corridor from Washington D.C. to Haymarket including parts of U.S. 29 and U.S. 50
- Evaluate short- and medium-term transit and TDM improvements and make recommendations
- Recommendations support established future vision of extending Metrorail
- Provide input into the restart of the I-66 Multimodal Transportation and Environmental Study

## ❑ Conducted by DRPT in coordination with a Technical Advisory Committee (TAC)

# Study Overview

## Corridor Map



# Existing Conditions

- ❑ Today there is robust transit service in the I-66 corridor:
  - Many local and express bus routes with good service frequencies
  - VRE Manassas Line and Metrorail Orange Line service
- ❑ Complementary transit services operate on U.S. 29 and U.S. 50
- ❑ High quality service is limited during off-peak periods and in the reverse peak direction
- ❑ High transit mode share from I-66 corridor to D.C. core

# General Travel Forecasts

- ❑ From 2005 to 2030:
  - Commuter trips originating in the corridor increase by 22%
  - Commuter trips destined to the corridor increase by 40%
  - The increase in destinations in the corridor are reflective of expanded suburban job opportunities
  - Travel patterns change with less emphasis on “downtown” commutes
  
- ❑ D.C., Rosslyn-Ballston and Tysons Corner are major transit destinations
  
- ❑ Transit mode share from the I-66 corridor to the core remains high point-to-point express services offer maximum time savings and thus are most attractive

# Market Research Findings

- ❑ **Most important factors** in choosing transit modes are:
  1. Time savings
  2. Cost savings
  3. Dependability
  
- ❑ Nearly two-thirds of current SOV drivers indicate that they would try shifting to transit if there were:
  - Improved access to stations
  - Priority Bus with limited stops
  - Comfort and convenience amenities
  
- ❑ Employer and institutional TDM support is necessary to encourage use of modes other than single-occupant vehicles
  
- ❑ Expanded telework programs could eliminate some commuter trips
  
- ❑ Increased marketing of existing transit/TDM services is needed

# Public Information Program

- ❑ Interviews conducted with over 40 key stakeholders in the I-66 corridor including:
  - Elected and appointed officials
  - Homeowner and civic associations
  - Chambers of commerce
  - Metro, Potomac Rappahannock Transportation Commission (OmniRide), *Fairfax Connector*, *CUE*, *ART*
  
- ❑ Six public information meetings conducted in two rounds
  
- ❑ Public Information findings include:
  - Traffic congestion in the I-66 corridor should be addressed as soon as possible
  - There is not just one solution to traffic congestion but rather a mix of improvements will be needed
  - Implementing elements of BRT was considered by most to make good sense for this region as a low cost precursor to rail



# Objectives Guiding Recommendations

- ❑ Transit service improvements should be demand-driven and designed to enhance existing services
- ❑ Services should reflect the basic market needs for transit to downtown D.C., Tysons Corner and the Rosslyn-Ballston corridor, with consideration given to new markets
- ❑ Transit service improvements would utilize existing HOV lanes due to the objectives and time horizon of the study
- ❑ Transit improvements would be designed so as to lay the groundwork for the extension of rail
- ❑ Any Priority Bus service framework proposed would be considered as part of an overall Northern Virginia Priority Bus system, including potential Priority Bus services along I-495 and I-95/I-395
- ❑ Proposed Priority Bus services should interface effectively with the Metrorail system

# Study Recommendations

## Proposed Infrastructure

- ❑ Add 2,650 parking spaces by 2015 and an additional 350 parking spaces by 2030 through capacity expansions at three existing lots and the construction of four new lots in the western end of the corridor
- ❑ Develop a system to provide real-time parking information to travelers about all park and ride lots in the corridor
- ❑ Construct direct access ramps from HOV lanes
- ❑ Signing and marking improvements, including a buffer between the General Purpose and HOV lanes (outside the Beltway) to improve the performance of the HOV lane
- ❑ Construction of eight Priority Bus stations in the I-66 corridor

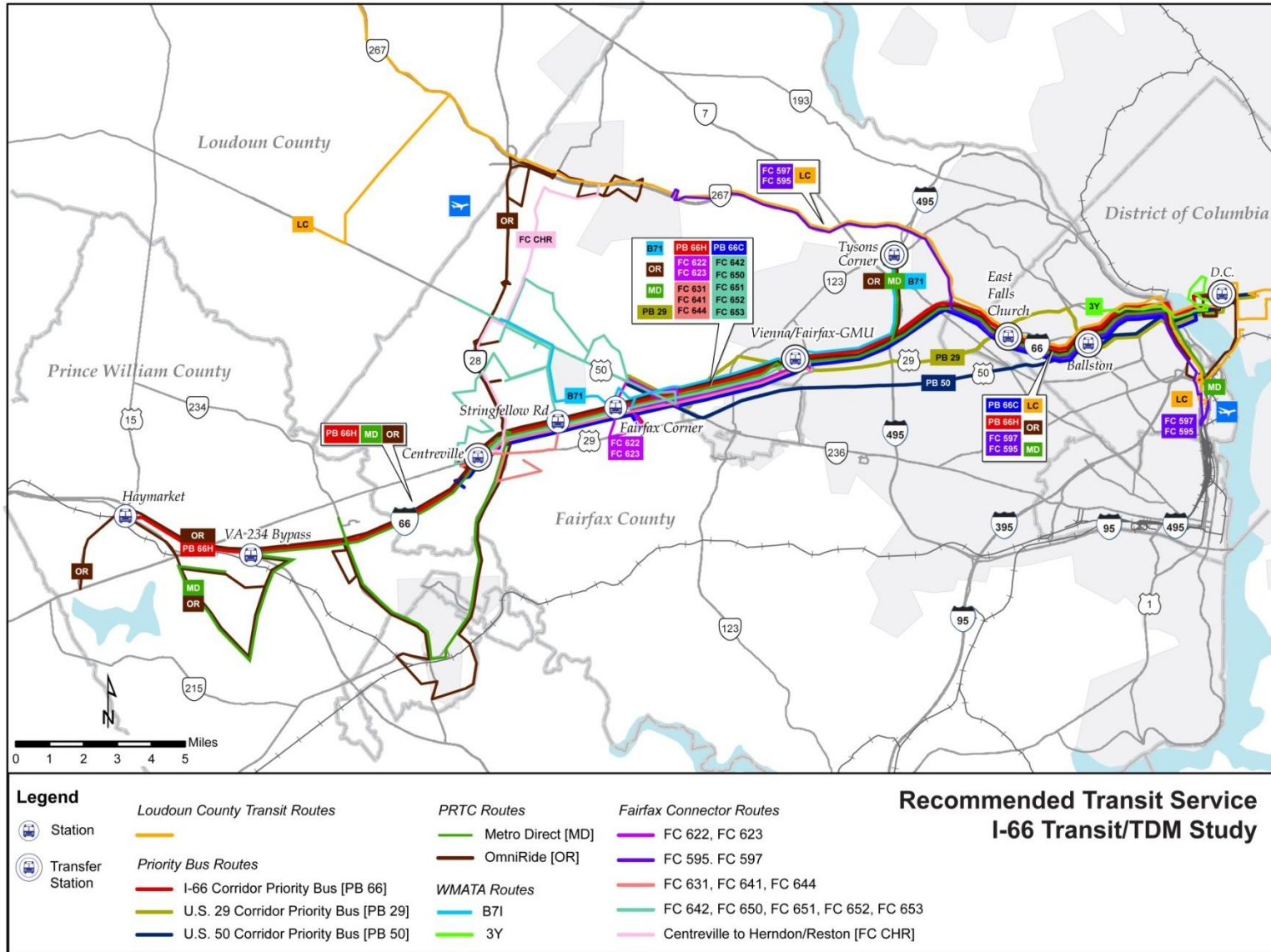
# Study Recommendations

## Proposed Services

- ❑ **New Priority Bus services**
  - U.S. 29 and U.S. 50 Metrobus Express services
  - I-66 corridor Priority Bus services from Haymarket and Centreville to D.C. Core
- ❑ **Increased service levels on selected routes**
  - Gainesville OmniRide
  - Manassas OmniRide
  - Manassas Metro-Direct
  - WMATA Columbia Pike-Farragut Square Line
- ❑ **Expanded transit destinations served including:**
  - Tysons Corner
  - Reston/Herndon area
  - VA 28 corridor/ Dulles International Airport
  - Ballston
- ❑ **Improvements to the corridor Priority Bus services**
  - Traveler information system upgrades (e.g., next bus, message notification)
  - Customer comfort and productivity amenities (e.g., seating at stations, WiFi service)
- ❑ **Enhanced transit-supportive TDM strategies**
  - Rideshare programs
  - Transit information programs

# Study Recommendations

## Transit Service and Stations



# Study Recommendations

## Related Recommendations

- ❑ Review adequacy of pedestrian and bicycle facilities at transit hubs and stations
- ❑ Transit-oriented development (TOD), as a part of new station area planning
- ❑ Integration of I-66 corridor Priority Bus services into regional Priority Bus System
- ❑ Additional Studies:
  - How transit ridership along the VA 28 corridor can best be realized
  - Identify preferred station location and form for a context-sensitive transportation hub at the terminal station in the Town of Haymarket
  - Planning for the longer-term extension of rail in the corridor, including Metrorail Orange Line and VRE

# Projected Costs

## Summary Cost Projections for Recommendations<sup>1</sup>

Plan Element	Annual Operating Cost <sup>2</sup>		Capital Cost		
	Short Term	Medium Term <sup>3</sup>	Short Term	Medium Term <sup>4</sup>	Total
Transit Services	\$10.1	\$11.1	\$35.7	\$47.5	\$83.2
Priority Bus Stations	-	-	\$57.3	\$112.2	\$169.5
Runningway Improvements	-	-	\$2.0	-	\$2.0
TDM Programs	\$1.5	\$3.6	\$5.3	\$0.5	\$5.8
Park and Ride	\$0.2	-	\$26.5	\$3.5	\$30.0
<b>Total</b>	<b>\$11.8</b>	<b>\$14.7</b>	<b>\$126.8</b>	<b>\$163.7</b>	<b>\$290.5</b>

1. All costs are expressed in millions of 2010 constant dollars and represent costs beyond providing existing programs and services.
2. Annual operating costs are expressed net of farebox revenue.
3. Medium-term operating costs are inclusive of costs to operate plan elements included as short-term recommendations; they are not additive with the short-term operating costs.
4. Medium-term capital costs include new programs, services, and infrastructure beyond the short-term recommendations, plus cost for vehicle replacements for services initiated in the short term.

# Key Concluding Messages

- ❑ Today there is robust transit service in the corridor
- ❑ Future land uses in the corridor may be less conducive to being served by transit
- ❑ Recommendations will make transit a more attractive option in the I-66 corridor:
  - Greatly increase service frequencies to important destinations
  - Provide travel time savings and reduce the number of transfers
  - Improve reliability of transit services
- ❑ Recommended TDM programs provide benefits to all travelers by reducing vehicle trips and raising awareness
- ❑ Capital investment of \$126.8 million in the short-term and an additional \$163.7 million in the long-term. Annual operating cost of \$11.8 million above the cost of existing service and \$14.7 million in the long-term

# Next Steps

- ❑ Short-term recommendations can be staged in accord with how rapidly each element can be implemented, thus the benefits can begin to accrue prior to 2015
  - Engineering review/design of the recommended HOV lane improvements
  - Expansions at the existing park and ride lots
  - Implementation of TDM programs
  - Performing recommended additional studies and pilot program
  - Preliminary engineering of the direct access ramps
  
- ❑ Results inform future I-66 Multimodal Studies expected to begin in Fall 2010





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